

# JUNE

at the

CALIFORNIA ACADEMY OF SCIENCES

## JUNE MEETING

DATE: Tuesday, June 15, 8:15 p.m.  
PLACE: Morrison Auditorium  
SUBJECT: Walt Disney's "NATURE'S HALF ACRE" and "WATER BIRDS"

Anyone who has seen previously either or both of these enchanting true-life adventures will understand readily the merit in re-presenting them to the Academy membership.

"Nature's Half Acre," one of Mr. Disney's early efforts in this genre, is an engrossing nature-drama depicting the continuity of life in birds, plants and insects through the four seasons. This result of patient camera work by fifteen naturalists-photographers spotlights the dramatic interdependence of one life upon another and nature's master plan of providing for all.



"Water Birds," a picture of unusual beauty, is alive with excitement and rare glimpses into the behavior of seaside and marshland feathered creatures. The film is climaxed by a bird ballet that is happily remembered by all who have witnessed it.

Both films are in color.

## MORRISON PLANETARIUM

Beginning June 2, Morrison Planetarium will present its summer spectacular sky show, "DESTINATION MARS!" Performances daily at 3:30 p.m. with evening shows, Wednesday through Sunday, at 8:30. Extra matinees on Saturday and Sunday at 2:00. The Planetarium is closed on Monday and Tuesday evenings. An expanded schedule of performances is planned for the summer months in order to accommodate the influx of visitors.

"DESTINATION MARS!" will continue through Labor Day, September 6. Admission: Adults, 75c, Juniors, 40c.

## MORRISON AUDITORIUM

"THE SEA OF CORTEZ," the Academy's documentary film about research and exploration in the Gulf of California, continues in the Science Theatre on weekends. Performances Saturdays and Sundays at 1:45, 2:15, and 3:45 p.m. Admission: Adults, 75c, Juniors, 40c.

## SPECIAL EXHIBITS

Exhibit of the Month: "SHARK JAWS" from the Academy's ichthyological collections. Main Foyer, Science Museum.

"PLANT PORTRAITS," a beautiful group of botanical prints by San Francisco artist Henry Evans continues in Lovell White Hall of Man and Nature throughout the month.

A selected group of Mr. Evans' prints is on sale at the Planetarium sales desk.

## NEWS and NOTES . . . . .

THE REPUTATION of the Academy was further enhanced in May with the publication of two books authored by staff members. The first, "THE ANIMAL KINGDOM," is the three-year effort of Associate Director Robert T. Orr who is also Curator of Birds and Mammals. Beautiful in format with hundreds of pictures in both color and black-and-white, with a highly informative text written in lay language, the 380 page volume will be a welcome addition to any library. It is published by The Macmillan Company of New York and is for sale at the Academy sales desks.

A previous book by Dr. Orr, "Vertebrate Biology," which appeared in 1961, has gone through a second printing with a second edition now in preparation.

Dr. Elizabeth McClintock, Associate Curator of Botany, is co-author (with Virginia Moore) of an Academy publication (Miscellaneous Paper No. 1) which will be of uncommon interest to all visitors to San Francisco and Golden Gate Park. It is titled "TREES OF THE PANHANDLE," is copiously illustrated with black-and-white photographs, and carries a comprehensive description of the wide variety of trees and shrubs which fill the approach to the Park. It, too, is on sale at the Academy sales desks.

A GRANT OF \$1500 has been made to the Academy by the Sanford Trust Fund of the Department of Ornithology of the American Museum of Natural History in furtherance of the current Oaxaca

Project. The Project, a joint effort of the American Museum, the Western Foundation of Vertebrate Zoology in Los Angeles, and the Academy, is devoted to a study of birds of southern Oaxaca, Mexico. The field work will be completed in September of this year.

FROM APRIL 10 through 16, eight members of the Student Section, with supervisor Ken Lucas in charge, engaged in a field trip which took them to various spots in California, Arizona and Mexico. Though some of the encountered weather left much to be desired, a total number of 763 specimens of rocks, minerals, insects, reptiles and small mammals was collected. The following tyro scientists made the trip: Ron Fong, Richard Hansen, Michael Hu, Peter Meserve, David Morafka, Nevin Resnick, Bill Rodgers, and Guy Williams.

AT 8:00 P.M on the evening of Thursday, July 1, the Pacific Coast Division of the Entomological Society of America and the Photographic Society of America, with the cooperation of the CAS, will present a program of prize-winning color slides of entomological subjects in Morrison Auditorium. The membership as well as the general public is invited to attend. There is no admission charge.



IN APRIL, the Wildlife Society of America named Dr. A. Starker Leopold, President of the Academy, the recipient of the Leopold Memorial Award. The award was established by the Society ten years ago in memory of Dr. Leopold's father, a pioneer and internationally-known expert in the science of game management.

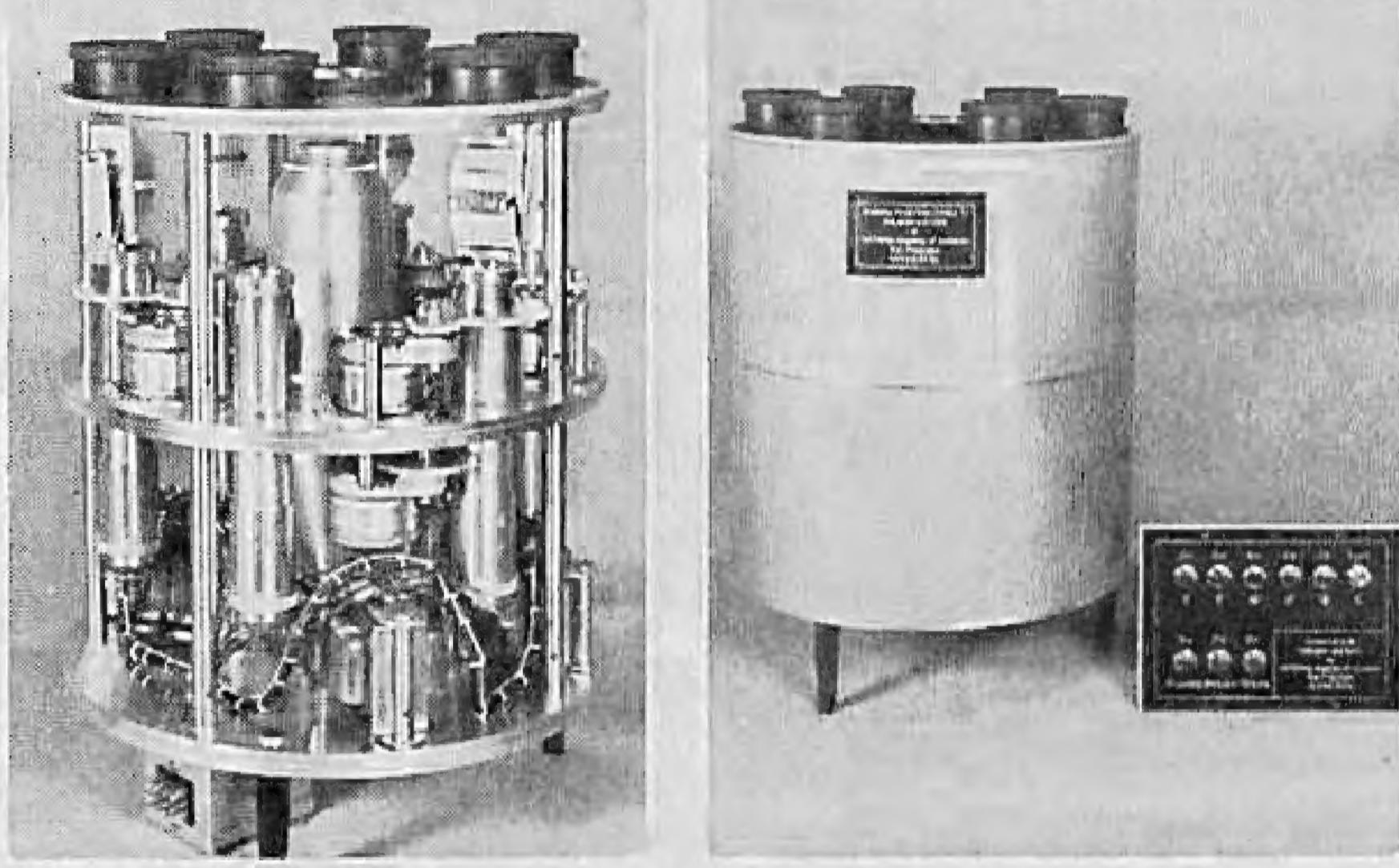
Dr. Leopold is a professor of zoology and Associate Director of the Museum of Vertebrate Zoology at the University of California at Berkeley.

BY ANY CHANCE does anyone within eyeshot have a refrigerator not in use which may be taking up valuable space in the basement or the garage? The Department of Exhibits is in dire need of one since its ancient model recently gave up altogether. If you *should* have one which you are willing to contribute, please telephone Mr. Carson at Bayview 1-5100 who will be more than happy to call for and deliver.

"Cissy," everybody's favorite harbor seal who shares the largest aquarium tank with two

dolphin friends, celebrated her second birthday in May. Her gala day was shared with the U. S. Women's Army Corps which was celebrating its 23d anniversary. At an affectionate ceremony, "Cissy" was made the official mascot of the U. S. Army 6th Recruiting District at the Presidio of San Francisco. Needless to say, "Cissy" basked in all the attention given.

## FROM THE ACADEMY WORKSHOPS



Mr. Webster's dictionary describes an orrery as "an apparatus which illustrates the relative positions and motions of bodies in the solar system by rotation and revolution of balls moved by wheelworks; a planetarium."

The projection orrery pictured above was designed and produced in the Academy's Instrument Shop by a gentleman of extraordinary technical talent, Mr. A. S. Getten (see *Newsletter*, July 1961). It consists of seven small projectors, with related equipment, housed in a cylindrical casing. Five of these, devoted to Mercury, Venus, Earth-Moon, Mars, and Jupiter, project planet images which are made to revolve in their respective orbits. These projectors are driven, through gear trains, by individual synchronous motors at their approximate relative speeds.

The sixth and seventh units project the Sun's image and the five planet orbits of correct relative dimensions.

Because of Mercury's changing angular velocity, elliptical gearing is used to give a closer approximation of its true motion. This is a feature unique in CAS projection orgeries.

Each of these seven projectors is a complete unit with its own light source, power supply and means of focusing and aligning its image. It is possible for a lecturer to set up any configuration of planets by

either of two control units which are available. The orrery is 16.6 inches high, 11.6 inches in diameter, and weighs 37.5 pounds.

Orreries such as that illustrated have been produced by the Academy's Instrument Shop (under contract arrangement) for many outside organizations.

*Photo by Maurice Giles,  
CAS*

## NEW MEMBERS OF THE ACADEMY

### Regular Membership

Mr. Leavitt Baker	Dr. R. Hewlett Lee
Mr. John Breslin	Miss Jeanne E. Manser
Miss Harriet B. Brewster	Marin County Library
Miss Barbara A. Carmichael	Mrs. Alan L. Marks
Cooley, Crowley, Gaither, Godward, Castro & Huddleson	Marjorie C. Maxwell
Dr. J. W. Cortner	Mr. Benjamin C. Mickle
Mme. Virginia Dalla Rosa	Miss Winifred C. Miles
Mr. Leroy G. Eisele	Mrs. E. G. Montgomery
Miss Carol A. Gray	Mr. Dean E. McHenry
Miss Mary Haight	Miss Lillian McHoul
Mr. Joseph G. Hall	Mr. Tohoru Nakatani
Miss Lois S. Hampton	Mr. Thomas K. Olsen
Mr. Monroe Hartman	Mr. Robert Payne
Mr. D. C. Higgins	Miss Winifred Scott
Mr. John B. Hillman	Mrs. Fred J. Shearn
Mr. Albert R. Hunter, Jr.	Mr. Edmond G. Thomas
Mr. George E. Jensen	Dr. Pauline E. Thompson
Mr. Michel J. Knight	Mr. Clayton A. Videen
Krogh Pump Company	Mr. Don R. Wobber
	Mr. Michael G. Wynkoop

Dr. A. E. Larsen

### Family Membership

Mr. Donald Browning	Mr. Glenn Mueller
Dr. D. W. Deetken	Mr. Franklin G. Rothwell
Major General &	Mrs. Mildred Sylvester
Mrs. James E. Frank	Mr. & Mrs. Donald E. Truman
Mr. George E. Heftel	Mr. & Mrs. Dudley Zappeltine
Mr. Robert P. Huston	Mr. Jack Zari

### Contributing Member

Mrs. Bruce Kelham

### Subscribing Member

Mr. Russell B. Coleman

### Annual Sponsor

Mr. Paul L. Wattis

### Student Members

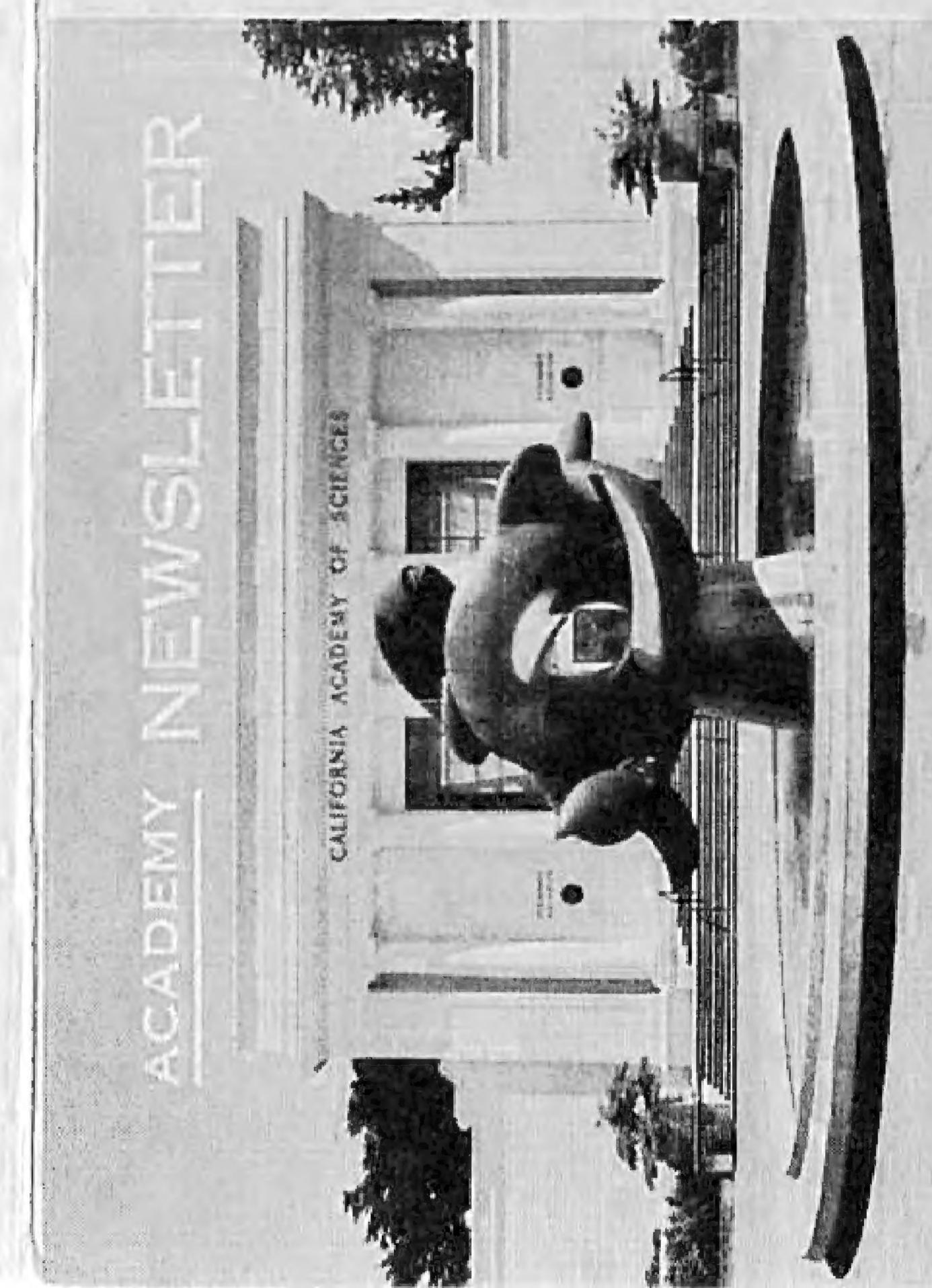
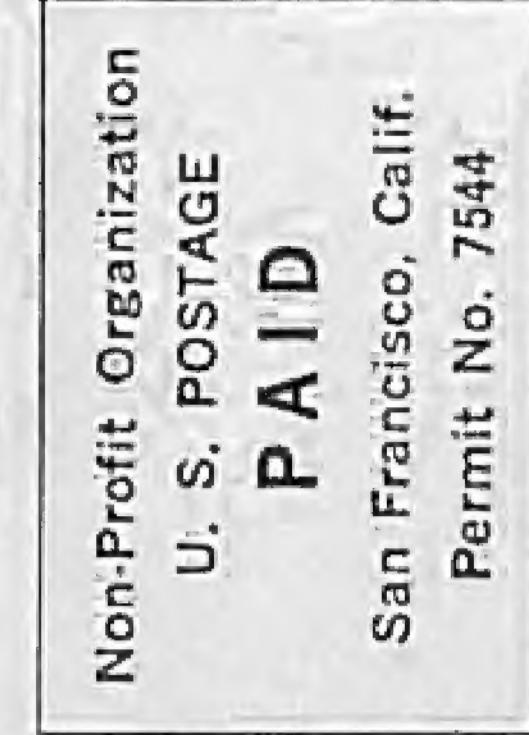
Neely Devon	Mark Johnson
Frank Dietderich	Patricia Lee
Mike Irish	Denis Marie Mears
Bruce Randall	

*THE CALIFORNIA ACADEMY OF SCIENCES  
GOLDEN GATE PARK • SAN FRANCISCO 94118*

Open every day of the year  
10:00 a.m. to 5:00 p.m.

Admission Free

*Printed by GRAPHIC ARTS OF MARIN, INC.*



No. 306 — Published Monthly by the  
**CALIFORNIA ACADEMY OF SCIENCES**  
**GOLDEN GATE PARK • SAN FRANCISCO 94118**  
JUNE 1965